



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/543,129	01/26/2006	Sang Woon Suh	1630-0488PUS1	2627
2292 7590 06/18/2009 BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747				
EXAMINER DAZENSKI, MARC A				
ART UNIT 2621		PAPER NUMBER		
NOTIFICATION DATE 06/18/2009		DELIVERY MODE ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary

Application No.

10/543,129

Applicant(s)

SUH ET AL.

Examiner

MARC DAZENSKI

Art Unit

2621

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 March 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 22-42 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 22-42 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 July 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SF 100)
- Paper No(s)/Mail Date 1-21-09, 2-11-09
- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

Applicant's arguments with respect to claims 22-42 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 22-24, and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tozaki et al (US Patent 7,398,010), hereinafter referred to as Tozaki, in view of Weijenbergh et al (US Patent 7,248,555), hereinafter referred to as Weijenbergh.

Regarding **claim 22**, Tozaki discloses an information recording medium, apparatus for recording the same and apparatus for reproducing the same. Further Tozaki discloses a recording apparatus that records control information, video information, and audio information onto an optical disc, which reads on the claimed, "a method of recording data on a recording medium," as exhibited in figure 8; the method comprising:

recording physical format information (202) in a lead-in area of the optical disc, the physical format information (20) including lowest reading rate information, the lowest reading rate information being set for each DVD on the basis of the compressing rate of the video information and the audio information recorded on the whole of the DVD (1) so as to reproduce the whole portion of one DVD (1) at a same linear velocity, which reads on the claimed, "recording a control information on a specific area of the recording medium, the control information including a playback speed information...and a playback speed of the playback speed information is for suitably reproducing a main data," as disclosed at column 14, lines 46-48 and exhibited in figures 5, 6, and 7 (wherein the playback speed of the playback speed information is for suitably reproducing a main data because the data would not be successfully reproduced if not read at the lowest reading rate); and,

recording information R, which is raw material such as audio information, video information, etc. onto the DVD (1), which reads on the claimed, "recording the main data in a main data area," as disclosed at column 16, lines 28-30.

However, Tozaki fails to disclose a maximum transfer rate information specifying a maximum transfer rate needed by an application, wherein the playback speed information is distinguished from the maximum transfer rate information. The examiner maintains that it was well known in the art to include the missing limitations, as taught by Weijenbergh.

In a similar field of endeavor, Weijenbergh discloses a device and method for recording information enabling reduced response time of a recording device. Further,

Weijenbergh discloses a table of physical disc information, byte 1 of which includes both disk size and the maximum transfer rate needed by an application, which reads on the claimed, "a maximum transfer rate information specifying a maximum transfer rate needed by an application, wherein the playback speed information is distinguished from the maximum transfer rate information," as disclosed at column 14, lines 8-18 and exhibited in figure 7.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the information recording medium, apparatus for recording the same and apparatus for reproducing the same of Tozaki to include a table of physical disc information, byte 1 of which includes both disk size and the maximum transfer rate needed by an application, as taught by Weijenbergh, for the purpose of identifying various reproduction rates needed to read content from an optical disc.

Regarding **claim 23**, the limitations of the claim are rejected in view of the explanation set forth in claim 22 above.

Regarding **claim 24**, the combination of Tozaki and Weijenbergh discloses everything claimed as applied above (see claim 23). Further, Tozaki discloses physical format information (202) which includes disk size, book type and version, disk structure, and recording density, which reads on the claimed, "wherein the control information table further includes a recording medium size and version information specifying a medium size and version number of the recording medium respectively, a medium structure information specifying a number of recorded layers and a type of the recorded

layers, and a recording density information associated with recording density of the recording medium," as exhibited in figure 6.

Regarding **claim 28**, the combination of Tozaki and Weijenbergh discloses everything claimed as applied above (see claim 22). Further, Tozaki discloses a maximum reading rate of 10.08Mbps or any value there multiplied by $(1/2)^n$, where n is a natural number, which reads on the claimed, "wherein the playback speed information is recorded as a ratio related to a transfer rate of the main data," as disclosed at column 14, lines 41-59.

Claims 25-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tozaki et al (US Patent 7,398,010), hereinafter referred to as Tozaki, in view of Weijenbergh et al (US Patent 7,248,555), hereinafter referred to as Weijenbergh, in view of Mishima et al (US Patent 7,343,083), hereinafter referred to as Mishima.

Regarding **claim 25**, the combination of Tozaki and Weijenbergh discloses everything claimed as applied above (see claim 22). However, the combination fails to disclose wherein the playback speed represents 1.2 or 1.5 times of reference speed. The examiner maintains that it was well known in the art to include the missing limitations, as taught by Mishima.

In a similar field of endeavor, Mishima discloses a digital video signal record and playback device and method for selectively reproducing desired video information from an optical disk. Further, Mishima discloses the rate control of the variable rate is set, in the beginning, to discrete rate goals such as 1Mbits, 1.5Mbits, 2Mbits, 2.5Mbits, 3Mbits, or the like so that each of the rate information in all the GOP is recorded on a disc,

which reads on the claimed, "include wherein the playback speed represents 1.2 or 1.5 times of reference speed," as disclosed at column 67, lines 31-34.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Tozaki and Weijenbergh to include the rate control of the variable rate is set, in the beginning, to discrete rate goals such as 1Mbps, 1.5Mbps, 2Mbps, 2.5Mbps, 3Mbps, or the like so that each of the rate information in all the GOP is recorded on a disc, as taught by Mishima, for the purpose of facilitating trick-play playback modes.

Regarding **claim 26**, the limitations of the claim are rejected in view of the explanation set forth in claim 25 above.

Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tozaki et al (US Patent 7,398,010), hereinafter referred to as Tozaki, in view of Weijenbergh et al (US Patent 7,248,555), hereinafter referred to as Weijenbergh, in view of Kojima (US Patent 5,953,484), hereinafter referred to as Kojima.

Regarding **claim 27**, the combination of Tozaki and Weijenbergh discloses everything claimed as applied above (see claim 22). However, the combination fails to disclose wherein the playback speed information is determined such that the main data on the recording medium is reproduced at a transfer rate of 36 Mbps, 40Mbps or faster. The examiner maintains that it was well known in the art to include the missing limitations, as taught by Kojima.

In a similar field of endeavor, Kojima discloses a video transmitting apparatus, video data receiving apparatus and video data transmitting and receiving system.

Further, Kojima discloses the data storage device (204) reproduces and outputs the once recorded video data at a transmission rate of the satellite communication line, for example, 40Mbps, which reads on the claimed, "wherein the playback speed information is determined such that the main data on the recording medium is reproduced at a transfer rate of 36 Mbps, 40Mbps or faster," as disclosed at column 7, lines 44-47.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify combination of Tozaki and Weijenbergh to include the data storage device (204) reproduces and outputs the once recorded video data at a transmission rate of the satellite communication line, for example, 40Mbps, as taught by Kojima, for the purpose of transmitting video data at a high quality.

Regarding **claims 29-35**, the examiner maintains the claims are the corresponding recording medium to the recording method of claims 22-28, and therefore are rejected in view of the explanation set forth in regards to claims 22-28 above.

Regarding **claims 36-44**, the examiner maintains the claims are the corresponding reproducing method to the recording method of claims 22-28, and therefore are rejected in view of the explanation set forth in regards to claims 22-28 above.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MARC DAZENSKI whose telephone number is (571)270-5577. The examiner can normally be reached on M-F, 9am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha Banks-Harold can be reached on (571)272-7905. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Marsha D. Banks-Harold/
Supervisory Patent Examiner, Art Unit 2621

/MARC DAZENSKI/
Examiner, Art Unit 2621